Amendments to the Specification:

Please amend the paragraph beginning on page 1, line 19 and ending on page 2, line 11, as follows:

Fig. 8 is a longitudinal sectional view showing the structure of a CPP-GMR head using a conventional CPP-GMR element. A CPP-GMR head 100 comprises a lower shield layer 110 extending in the X direction shown in the drawing, a lower nonmagnetic metal film 120 formed on the lower shield layer 110 at its center in the X direction, and a free magnetic layer 131, a nonmagnetic metallic material layer 132, a pinned magnetic layer 133 including sublayers 133a, 133b, and 133c, an antiferromagnetic layer 134, and an upper nonmagnetic metal film 140, which are laminated on the lower nonmagnetic metal film 120. The CPP-GMR head 100 further comprises an upper shield layer 150 formed over the upper nonmagnetic metal film 140 to extend in the X direction, hard bias layers 163 formed in contact with parts of both sides of the free magnetic layer 131 and with both sides of the nonmagnetic layer 132, insulating layers 161 filling in the respective spaces between the hard bias layers 163 and the lower shield layers 110, and insulating layers 164 filling in the respective spaces between the hard bias layers 163 and the upper shield layer 150. Furthermore, bias underlying layers 162 are disposed between the hard bias layers 163 and the insulating layers 161.

Please amend the paragraph beginning on page 24, line 6 and ending on page 24, line 16, as follows:

Then, the GMR element ~~T1~~ 30 is annealed in a magnetic field in the height direction (the Y direction shown in the drawings) to produce an exchange coupling magnetic field between the antiferromagnetic layer 34 and the first pinned magnetic layer 33c. For example, the annealing temperature is about 270°C, and the magnitude of the applied magnetic field is about 800 kA/m. In the annealing in the magnetic field, the magnetization direction of the first pinned magnetic layer 33c is pinned in the height direction, and the magnetization direction of the second pinned magnetic layer 33a is pinned in antiparallel to the height direction.

Please amend the paragraph on page 28, lines 6 through 16, as follows:

As shown in Figs. 7A-7C, the antiferromagnetic layer is not provided, and the pinned magnetic layer 33 may extend to the rear of the free magnetic layer 31 and the nonmagnetic layer 32 in the height direction so that the dimension h2 of the pinned magnetic layer 33 in the height direction is larger than the dimension Tw in the track width direction (Tw < h2 and h1 < h2). In this case, shape anisotropy occurs in the pinned magnetic layer 33 in the height direction, and thus the magnetization directions of the first and second pinned magnetic layers 33c and 33a can be stabilized by the shape anisotropy in a direction parallel to the height direction. Layer 71 shown in Fig. 7A is an insulator.